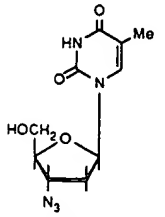
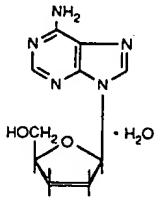
# Radiolabeled Anti-AIDS Compounds from Sigma

2′,3′-Dideoxynucleosides are potent inhibitors of human acquired immune deficiency syndrome (AIDS) virus. Their pharmacological activity is attributed partly to the formation of the 5′-triphosphates by nucleoside kinases. The 5′-triphosphate analogs inhibit cellular DNA polymerases as well as reverse transcriptase. These anti-AIDS compounds lack a hydroxyl group at the 3′-position, thereby inhibiting elongation of the DNA chain. Recent clinical studies have shown that DDC, DDA and DDI are much more potent in the treatment of AIDS than AZT, and lack AZT's harsh side effects. AZT has also been more effective when used in combination with other dideoxynucleosides.[1-3]

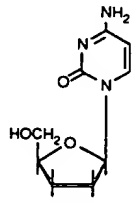

**References:**
(1) Mitsuya, H.; Broder, S. *Nature* **1987**, *325*, 773. (2) *Idem Proc. Natl. Acad. Sci. U.S.A.* **1986**, *83*, 1911.
(3) Dagani, R. "The Quest for Therapy." In *Chem. Eng. News* **1987**, *65*(47),

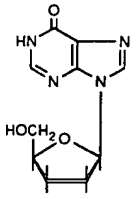
**A 6175**
**3′-Azido-3′-deoxythymidine-2-$^{14}C$**
**(AZT-2-$^{14}C$)**



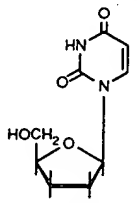
**D 0412**
**2′,3′-Dideoxyadenosine-8-$^{14}C$**
**(DDA-8-$^{14}C$)**



**D 7206**
**2′,3′-Dideoxycytidine-2-$^{14}C$**
**(DDC-2-$^{14}C$)**



**D 0537**
**2,′3′-Dideoxyinosine-8-$^{14}C$**
**(DDI-$^{14}C$)**



**D 7411**
**2′,3′-Dideoxyuridine-2-$^{14}C$**
**(DDU-2-$^{14}C$)**

***Please contact our Radiochemicals Department for prices and availability.***

## *Starting Materials and Related $^{3}H$ and $^{14}C$ Radiochemicals*

| | | |
|---|---|---|
| I 7637 | Inosine-8-$^{14}C$, 40-60mCi/mmol (pfs) | 50μCi $185.00; 250μCi $725.00 |
| 32,222-9 | Thymidine-*methyl*-$^{3}H$, 2Ci/mmol (pfs) | 250μCi $91.00; 1mCi $160.00 5mCi $390.00 |
| 32,221-0 | Thymidine-*methyl*-$^{3}H$, 5Ci/mmol (pfs) | 250μCi $91.00; 1mCi $160.00 5mCi $390.00 |
| 32,220-2 | Thymidine-*methyl*-$^{3}H$, 40-60Ci/mmol (pfs) | 250μ $91.00; 1mCi $160.00 5mCi $390.00 |
| T 5280 | Thymidine-2-$^{14}C$, 10-25mCi/mmol (pfs) | 50μCi $285.00; 250μCi $595.00 |
| T 9019 | Thymine-2-$^{14}C$, 45-50mCi/mmol (pfs) | 50μCi $110.00; 250μCi $395.00 |
| U 3879 | Uracil-2-$^{14}C$, 45-80mCi/mmol (pfs) | 100μCi $135.00; 250μCi $325.00 |
| 32,225-3 | Uracil-5-$^{3}H$, >20Ci/mmol (pfs) | 1mCi $200.00; 5mCi $447.00 |
| 32,226-1 | Uracil-5,6-$^{3}H_2$, 30-40Ci/mmol (pfs) | 1mCi $200.00; 5mCi $447.00 |
| U 3504 | Uridine-2-$^{14}C$, 10-25mCi/mmol (pfs) | 50μCi $295.00; 250μCi $995.00 |

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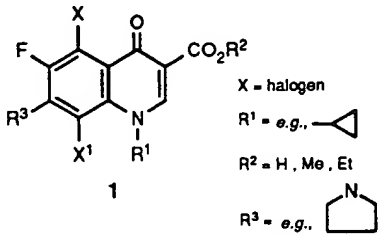
From anywhere outside the USA/Canada call collect: 314-771-5750

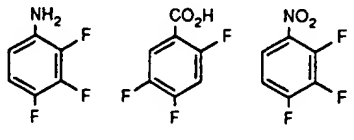
## *Intermediates to Fluoroquinolone Antimicrobials*



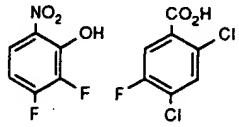

1

One of the most exciting recent developments in pharmaceutical chemistry is the discovery of fluoroquinolones (1), the first significant new class of antimicrobials since the cephalosporins in 1962.

Aldrich is pleased to offer a number of key intermediates to these fluoroquinolones.



2 3 4

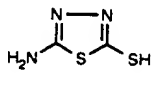


5 6

**30,435-2 2,3,4-Trifluoroaniline, 98% (2) 5g $14.60; 25g $48.60**
**32,815-4 2,4,5-Trifluorobenzoic acid, 99% (3) 1g $19.50; 5g $65.00**
**33,836-2 1,2,3-Trifluoro-4-nitrobenzene, 99% (4) 5g $13.00; 25g $44.00**
**34,153-3 2,3-Difluoro-6-nitrophenol, 99% (5) 1g $9.00; 5g $33.00**
**34,397-8 2,4-Dichloro-5-fluorobenzoic acid, 99% (6) 250mg $7.00; 1g $20.00**

*If you would like to try a compound which we do not now list, please give us a call. We will gladly consider making it.*

## *Conservation Tool*



Interesting bronze-cleaning material for the conservator and archivist.

*Studies in Conservation*; Vol. 33, No. 2, p 97, 1988.

**12,790-6 5-Amino-1,3,4-thiadiazole-2-thiol, 98% 10g $7.25; 50g $18.55**